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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/591,393 | 11/10/2006 | Patrick Lenoir | 016782-0365 | 9571 |
| 22428 7590 08/08/2008 FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007 | | | EXAMINER GRAVINI, STEPHEN MICHAEL | |
| | | | ART UNIT 3749 | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/591,393

Applicant(s)

LENOIR, PATRICK

Examiner

Stephen Gravini

Art Unit

3749

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 November 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date 20070117
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8, 11-13, and 15-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Bakalar (US 5,966,835). The claims are reasonably and broadly construed, in light of the accompanying specification, to be disclosed by Bakalar, as comprising:

at least two adjacent rows of gas-heated infrared radiant elements **38** stretching out in the transversal direction of the web substantially over the entire width of the web, said infrared drier installation comprises means to recycle, at least partially, the said combustion gases, wherein said infrared drier comprises means to avoid the suction of cold air between two adjacent rows of radiant elements. Bakalar also discloses the claimed means to avoid the suction of cold air between two adjacent rows of radiant elements is a sealing gasket **42**, wherein said drier installation comprises devices that form an insulating thermal arc stretching out to the neighborhood of the backside of the radiant elements at column 11 line 58, wherein said means that form an insulating thermal arc have peripheral walls stretching out to the neighborhood of the web, at least along the lateral edges and the upstream transversal edge of the set of radiant elements as shown in figure 3, wherein each radiant element has first detachable

connecting devices adapted to cooperate with second detachable complementary connecting devices coupled by at least one fixed pipe supplying gas, combustion air or a mixture of gas and air; the first and second detachable connection devices, said detachable connection are for part of a quick connect coupling at column 13 line 65 through column 14 line 11, wherein the first and the second connection devices are designed so as to oppose a preset maximal resistance and to yield, in a reproducible way, to a load force that exceeds this maximal resistance at column 13 line 65 through column 14 line 11, wherein said drier installation has for each row of radiant elements a corresponding gas tube, which has, for each radiant element, a fixed pipe that supplies gas to the said radiant element, and wherein each radiant element has on its backside a back tubing supplying a mixture of air and gas that is adapted to be directly coupled in a detachable and tight way with the corresponding fixed gas pipe, in which the fixed pipe or the back tubing has an air inlet opening that communicates with the air tube to form the mixture of air and gas at column 14 lines 18-31, wherein for each row of radiant elements, a combustion air supply tube placed between the radiant elements and the corresponding gas tube, and wherein for each radiant element, the combustion air tube has opposite openings respectively made in two opposite regions of the wall of the air tube, a first opening that is made in a first region adjacent to the radiant element, and a second opening that is made in a second region adjacent to the gas tube, and wherein through each of the openings passes the corresponding fixed pipe or the corresponding back tubing as shown in figure 2, wherein said drier installation has first collection devices to collect downstream the radiant elements at least a part of the warm

combustion gases produced by the said radiant elements, and first blowing devices to blow on the passing web, downstream the first collection devices, a gaseous mixture that is warmed up by these warm gases at column 15 lines 45-65, , wherein said drier installation has several ventilators, arranged according to a row stretching out in the transversal direction of the passing web, in which each ventilator is connected to collection hoods and to blowing hoods, respectively covering a part of the width of the passing web as shown in figure 1, wherein each ventilator is situated above the said collection and blowing hoods, adjacent to the corresponding radiant elements, in relation to the said hoods at column 16 lines 28-48, wherein each radiant element comprise a locking device to lock said radiant element in its working position at column 16 lines 15-21, wherein each radiant element comprise means to insulate the warm combustion gases from the backside of the said radiant element at column 11 line 58.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 9-10 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bakalar. Bakalar discloses the claimed invention, as rejected above, except for the claimed tight way passage and gas injector location. It would have been an obvious matter of design choice to provide those features to Bakalar, since the invention as claimed would be performed by the prior art, regardless of the claimed location arrangement.

Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bakalar in view of Riepe et al. (US 6,665,950). Bakalar discloses the claimed invention, as rejected above, except for the claimed peripheral jacket and cold air infiltration means. Riepe, another drier installation, discloses those features at column 3 lines 15-60. It would have been an obvious to one skilled in the art to provide those features to Bakalar for the purpose of maximizing dryer efficiency by providing optimum heat and air flow in an infrared drying application.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Gravini whose telephone number is 571 272 4875. The examiner can normally be reached on normal weekday business hours (east coast time).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven B. McAllister can be reached on 571 272 6785. The fax phone

Art Unit: 3749

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

August 5, 2008
/Stephen Gravini/
Primary Examiner, Art Unit 3749